

PARASITES OF THE WOMBAT *VOMBATUS URSINUS* FROM THE GIPPSLAND REGION, VICTORIA

There have been a number of taxonomic papers on the helminths of the common wombat *Vombatus ursinus* but no detailed studies of their parasite fauna. Fascioliasis, an economically important disease of domestic ruminants, is sometimes found in wombats grazing contaminated agricultural pasture.¹ But in a study on the prevalence of *Fasciola hepatica* infection in south eastern Australia, no hosts were collected from the Central Gippsland region.² The wombat is commonly and widely distributed across Gippsland³, pasture damage and fence destruction being such that it is still legally designated vermin. From 1982 to 1984 wombat road kills were collected and examined to determine their parasite fauna, and the results are presented here.

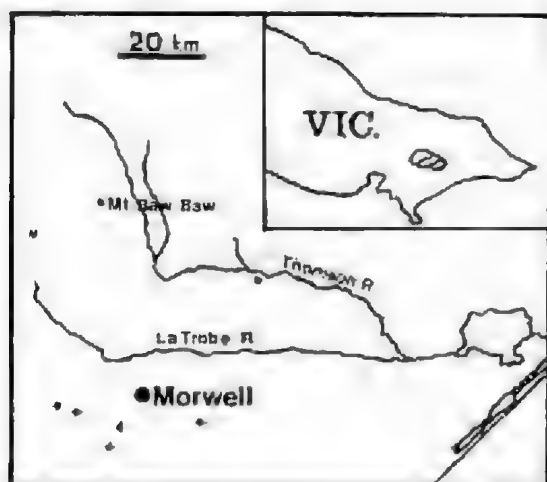


Fig. 1. Localities in the Gippsland region where wombats were collected.

Although a number of road kills were sighted within the study area, only seven were suitable for further examination (Fig. 1). The internal viscera were examined for gross pathological changes, then the lungs, liver and gut contents were examined under a dissecting microscope for internal parasites. Nematodes and cestodes were fixed in 10% formalin. Nematodes were stored in 70% alcohol

with 5% glycerol and identified in lactophenol. Ticks were stored in 70% alcohol.

Of the seven individuals examined, one was infected with the mite, *Sarcoptes scabiei* Degeer, 1778 while five harboured ticks, *Aponomma auruginans* Schultz, 1936. No gross pathological conditions were found and no helminths were observed in sites other than the digestive tract. Two hosts harboured cestodes, *Phascolotaenia comani* Beveridge, 1976 in the ileum of one and *Triplotaenia undosa* Beveridge, 1976 in the duodenum of another. All seven hosts were infected with the nematodes *Phascolostrongylus turleyi* Canavan, 1931 and *Oesophagostomoides longispicularis* Beveridge, 1978 while four hosts also were infected with *O. gilmeri* Schwartz, 1928 (Table 1). The parasite burdens were not high and except for the wombat with mange all the hosts seemed to be in good physical condition. No trematode infections, and more specifically no *Fasciola hepatica* infections were found.

This is the first record of *T. undosa*, previously known only from macropodids, in a wombat. *Triplotaenia undosa* is found in a number of macropodid hosts including *Wallabia bicolor* and *Macropus fuliginosus*, both of these being common throughout Victoria⁴. However, the only record of *T. undosa* from Gippsland hosts is from *W. bicolor* collected at Bonang in East Gippsland, and not from either *W. bicolor* or *M. fuliginosus* sharing their range with wombats in the present study area.

Oesophagostomoides gilmeri was the least common of the nematode species found and had not previously been noted in hosts from Central Gippsland. Usually recorded as parasites of the colon all three species were also found in the small intestine and on one occasion the caecum. This distribution is probably a function of post mortem migration from the colon. Although there is moderate resistance by wombats to *F. hepatica*¹, it is more likely in this case that no infections of *F. hepatica* were found because the specimens collected were not grazing in infected areas. Central Gippsland is not one of the main habitats for *Lymnaea tumentosa* the intermediate host snail,⁵ and nor is fascioliasis a significant problem of sheep and cattle from the study area (Regional Veterinary Laboratory, Bairnsdale, pers. comm.).

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TABLE 1. Site in host and abundance of infections with *Oesophagostomoides longispicularis*, *O. gilmeri* and *Phascolostrongylus turleyi* from seven wombats.

Parasite	Ileum		Site in Host Caecum		Colon	
			No. Parasites/Host			
	Mean	Range	Mean	Range	Mean	Range
<i>O. longispicularis</i>	17	0-58	0.71	0-5	23.7	0-62
<i>O. gilmeri</i>	5.4	0-29	0.14	0-1	3.7	0-15
<i>P. turleyi</i>	46	0-293	0	0	47.7	0-113

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- ³**Norris, K. C., Mansergh, I. M., Ahern, L. D., Belcher, C. A. A., Temby, I. D., Walsh, N. G.** (1983) Fish. Wildl. Div. Vic. Occ. Paper 1.
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- ⁵**Seddon, H. R.** (1967) "Diseases of Domestic Animals in Australia. Part 1 Helminth infestations." Revised by Albiston, H. E. (Commonwealth Department of Health, Canberra).

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